The Impact of Size of Unit on Responses to DEOCS

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Abstract

In this research brief we explore the impact of unit size on responses to the DEOCS as well as on the potential willingness of individuals who completed questionnaires to disclose their sex.

Results suggest that larger units are more likely to report negative perceptions (based on slightly lower mean scores) than smaller units for both equal opportunity (EO) climate and organizational effectiveness (OE) scales. Perhaps individuals in smaller units are more concerned that their responses would not be anonymous or even confidential. The smallest and largest units had the smallest percentage of male respondents while women from units requesting at least 100 questionnaires/codes were more likely to respond. Perhaps women at the larger installations felt more anonymous as there are likely to be more of them at larger units. The largest percentage of female respondents came from units requesting 1000 or more surveys (or codes). Size of unit (as based on requests for surveys/codes) clearly seems to impact the number of questionnaires completed by women.

The findings in this report are not to be construed as an official DEOMI, U.S. military Services, or the Department of Defense position, unless designated by other authorized documents.

The Impact of Size of Unit on Responses to DEOCS

We were interested in whether or not the size of the unit would impact individual responses. It could be the case that individuals in larger units felt that they were less able to be identified and would be more willing to state less positive perceptions about the equal opportunity (EO) scales. We used the number of internet codes or paper copies of the questionnaire requested by the commanding officer as an approximation of unit size, and recoded that variable into meaningful categories.

Table 2 shows the mean scores for the scales measuring different aspects of the EO climate in a unit by the size of the unit. Results clearly illustrate that larger units are more likely to report negative perceptions (based on slightly lower mean scores) than smaller units. Perhaps individuals in smaller units are more concerned that their responses would not be anonymous or even confidential.

Table 3 displays the mean scores of the organizational effectiveness (OE) scales by size of unit. The pattern is similar to that of Table 2, with those in larger units more likely to indicate negative perceptions about OE.

Table 4 displays the sex of respondents, including those responses with missing values for sex by the size of the unit. Interestingly, the smallest and largest units had the smallest percentage of male respondents while both of the smallest size categories had the smallest percentages of female respondents. Perhaps women at the larger installations (those requesting at least 100 questionnaires/codes) felt more anonymous as there are likely to be more of them at larger units. It is interesting to note that close to half (49.69%) of those respondents with missing values on sex came from the largest units, although this may, at least in part, reflect the earlier problems noted with the paper version of the questionnaire.

Table 5 profiles the sex of respondents by the size of the unit based on requested questionnaires or internet codes. It is clear that the largest percentage of female respondents came from units requesting 1000 or more questionnaires (or codes). Those same units have the largest percentage of respondents with missing values for sex. Size of unit clearly impacts the number of questionnaires completed by women. If women are likely to answer some questions differently than men, but are more comfortable responding honestly at larger units, this could give a distorted view of the EO climate and of OE at least at smaller units.

Table 1

Grouped Size of Unit Based on Number of Surveys or Codes Requested

	Unit Size	Frequency	Percent
	Under 50	11289	7.35
	50-99	16019	10.43
	100-249	42833	27.90
	250-449	33896	22.08
	450-999	33150	21.59
	1000 or more	16292	10.61
Subtotal		153479	99.96
Missing		68	0.04
Total		153547	100

Table 2
Scales Measuring EO Climate by Unit Size

Unit Size		Sex Harr/Disc	Diff Cmd	Pos EO	Racist	Age	Religious	Disability
Under 50	Mean	4.27	4.59	4.09	4.06	4.25	4.55	4.50
	N	11136	11107	11174	11165	1662	11103	1656
	Std. Deviation	0.85	0.70	0.99	1.02	0.99	0.72	0.80
50-99	Mean	4.21	4.54	4.07	4.00	4.17	4.49	4.43
	N	15747	15645	15856	15817	2087	15631	2068
	Std. Deviation	0.88	0.76	1.00	1.06	1.06	0.78	0.87
100-249	Mean	4.13	4.51	4.06	3.86	4.01	4.44	4.23
	N	42116	41714	42434	42339	5603	41713	5564
	Std. Deviation	0.93	0.79	1.01	1.11	1.11	0.83	0.99
250-449	Mean	4.05	4.44	4.07	3.77	3.99	4.39	4.25
	N	33465	33209	33677	33589	4847	33154	4774
	Std. Deviation	0.96	0.82	1.00	1.14	1.13	0.85	0.99
450-999	Mean	4.01	4.41	4.03	3.71	3.92	4.32	4.19
	N	32596	32267	32948	32840	6967	32131	6762
	Std. Deviation	0.99	0.87	1.02	1.18	1.14	0.92	1.02
1000 or mor	e Mean	4.05	4.37	3.99	3.78	4.01	4.36	4.27
	N	16096	15970	16212	16175	6912	15904	6867
	Std. Deviation	0.99	0.88	1.05	1.18	1.15	0.90	0.99
Total	Mean	4.10	4.46	4.05	3.83	4.01	4.41	4.27
	N	151156	149912	152301	151925	28078	149636	27691
	Std. Deviation	0.95	0.82	1.01	1.13	1.13	0.85	0.98

Note. N = number of responses; Sex Harr/Disc = sexual harassment/discrimination; Diff Cmd = differential command behavior toward minorities; Pos EO = positive EO behaviors; Racist = racist behaviors; Age = age discrimination; Religious = religious discrimination; Disability = disability discrimination.

Table 3
Scales Measuring EO Climate by Unit Size

Unit Size		Org Cmt	Trust Org	Wrk Grp E	Wrk Grp C	Leader Coh	Job Sat
Under 50	Mean	3.62	3.58	4.28	4.10	3.65	3.97
	N	11170	11169	11167	11164	11163	11166
	Std. Deviation	0.98	1.03	0.79	0.92	1.10	0.83
50-99	Mean	3.57	3.54	4.19	4.04	3.62	3.90
	N	15853	15835	15840	15830	15827	15836
	Std. Deviation	0.99	1.05	0.83	0.94	1.10	0.85
100-249	Mean	3.53	3.52	4.19	4.02	3.63	3.89
	N	42448	42368	42391	42363	42382	42413
	Std. Deviation	0.99	1.05	0.84	0.94	1.08	0.86
250-449	Mean	3.40	3.36	4.13	3.91	3.48	3.81
	N	33687	33635	33655	33628	33615	33636
	Std. Deviation	0.97	1.05	0.85	0.97	1.08	0.87
450-999	Mean	3.41	3.40	4.09	3.90	3.51	3.81
	N	32928	32821	32896	32841	32839	32871
	Std. Deviation	0.98	1.06	0.88	0.98	1.10	0.89
1000 or more	Mean	3.48	3.34	4.14	3.88	3.44	3.85
	N	16212	16190	16187	16180	16167	16194
	Std. Deviation	0.95	1.05	0.88	1.01	1.10	0.87
Total	Mean	3.48	3.44	4.16	3.96	3.55	3.86
	N	152298	152018	152136	152006	151993	152116
	Std. Deviation	0.98	1.05	0.85	0.97	1.09	0.87

Note. N = number of responses; Org Cmt = organizational commitment; Trust Org = trust in organization; Wrk Grp E = work group effectiveness; Wrk Grp C = work group cohesion; Leader Coh = leadership cohesion; Job Sat = job satisfaction.

Table 4
Sex of Respondents Including Missing Values by Unit Size (%)

	Unit Size	Male	Female	Missing	Total
	Under 50	7.25	8.41	3.24	7.36
	50-99	10.40	11.35	5.22	10.44
	100-249	29.10	24.22	15.00	27.91
	250-449	22.69	21.18	8.47	22.09
	450-999	21.87	20.81	18.38	21.60
	1000 or more	8.69	14.02	49.69	10.62
Total		100	100	100	100
Ν		123139	26607	3733	153479

Table 5

Profile of Sex of Respondents by Size of Unit (%)

Unit Size	Male	Female	Missing	Total	N
Under 50	79.10	19.82	1.07	100	11289
50-99	79.92	18.86	1.22	100	16019
100-249	83.65	15.04	1.31	100	42833
250-449	82.44	16.62	0.93	100	33896
450-999	81.22	16.71	2.07	100	33150
1000 or more	65.71	22.90	11.39	100	16292